

Technology diffusion in agro-cluster: The role of multinational companies in the case of Almeria (Spain)

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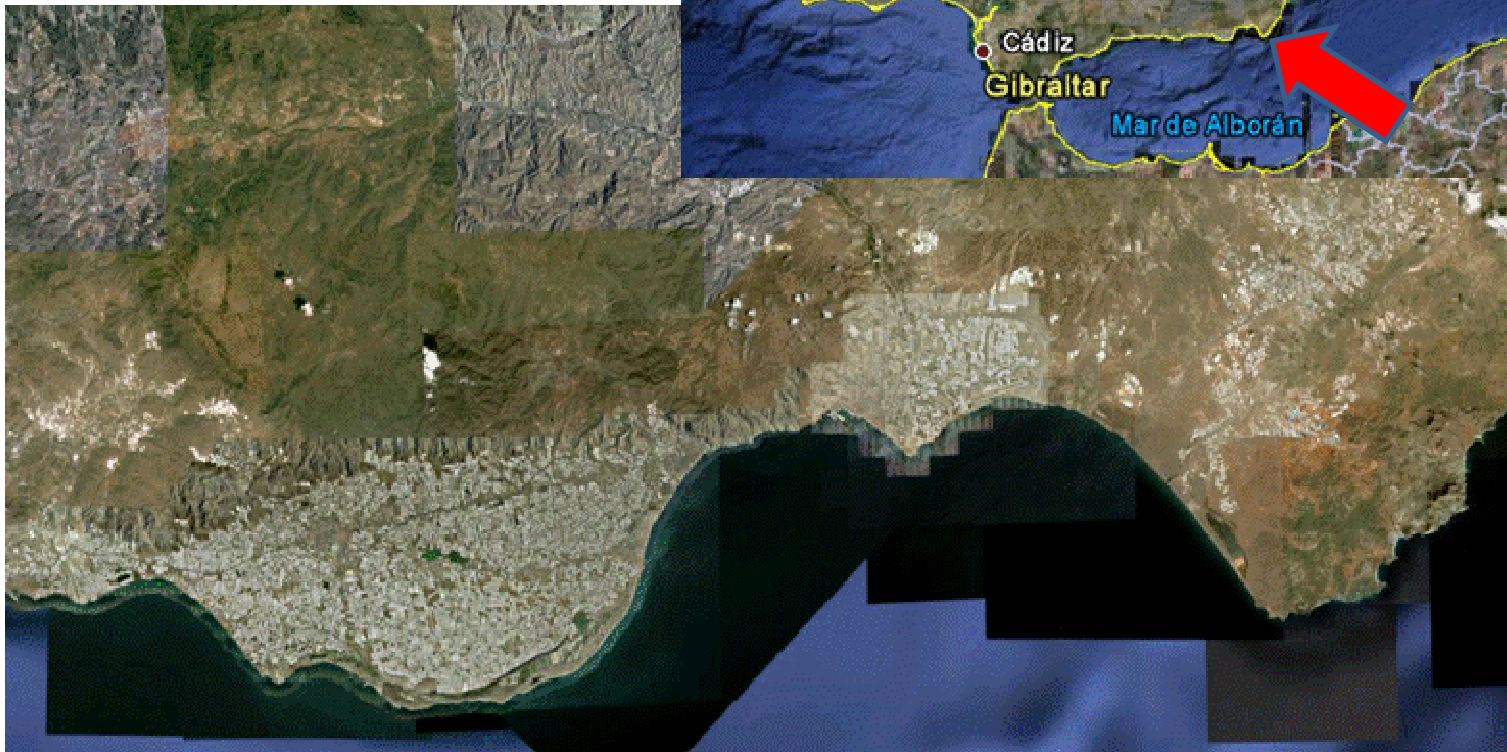
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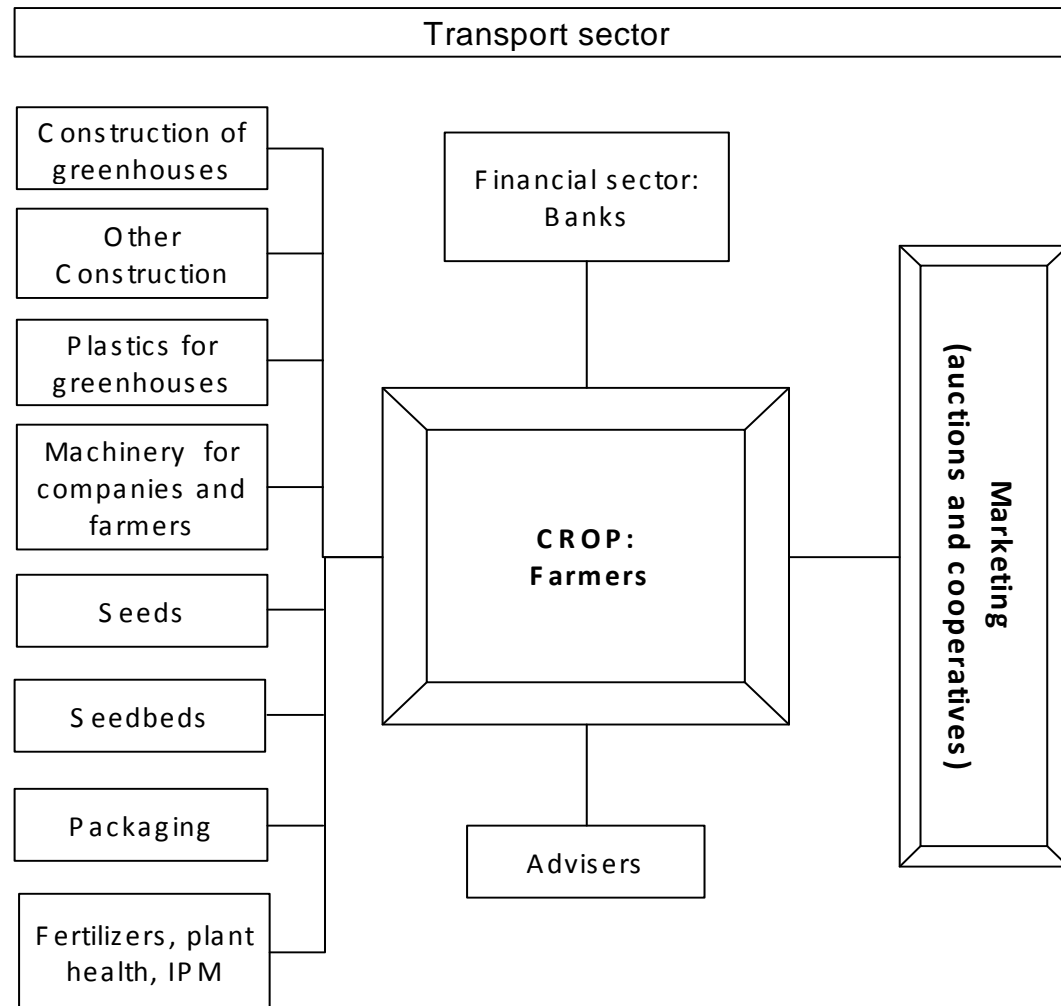
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Almeria has the most important concentration of greenhouses in the world

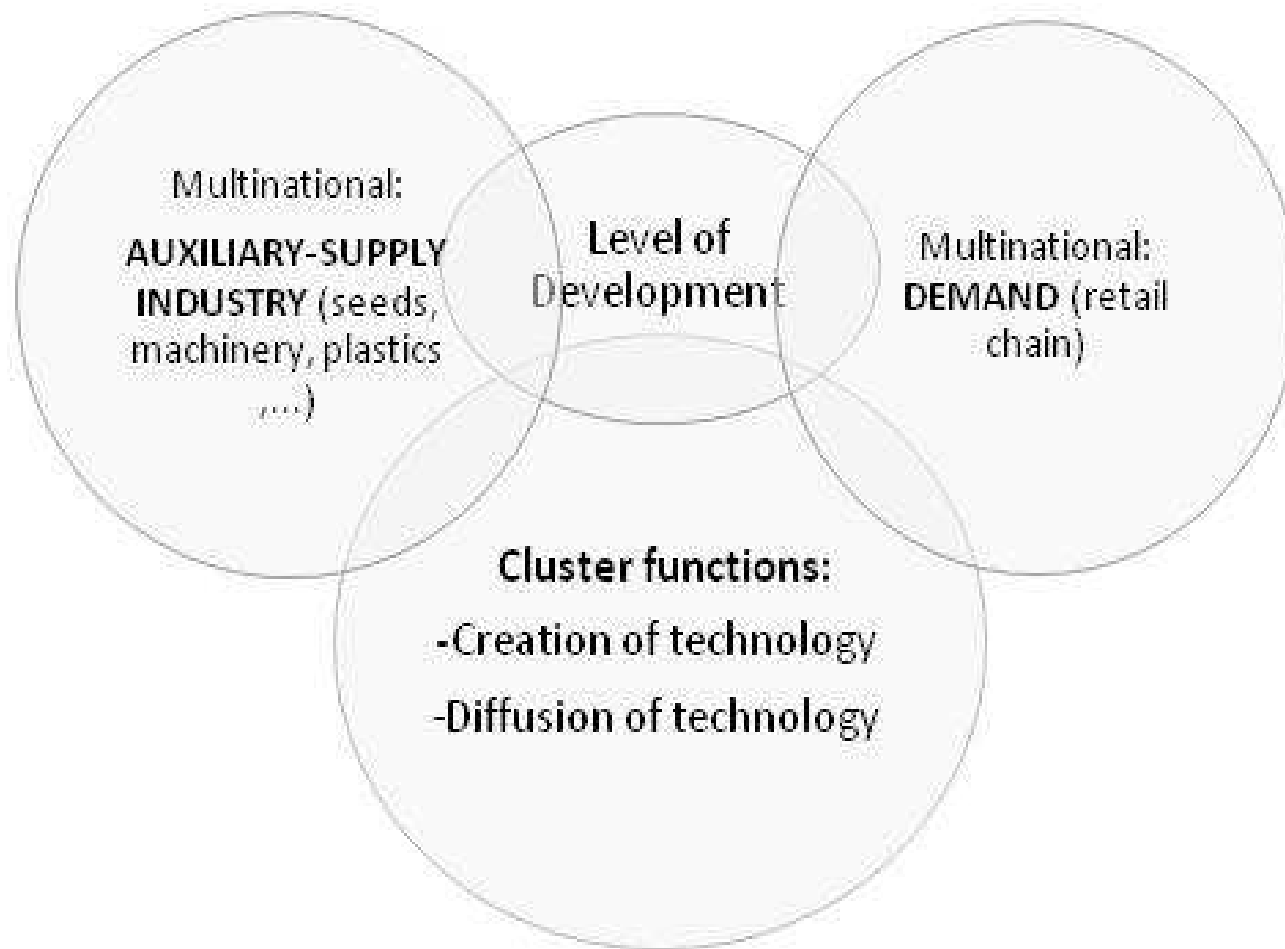




Almerian Horticultural Cluster System



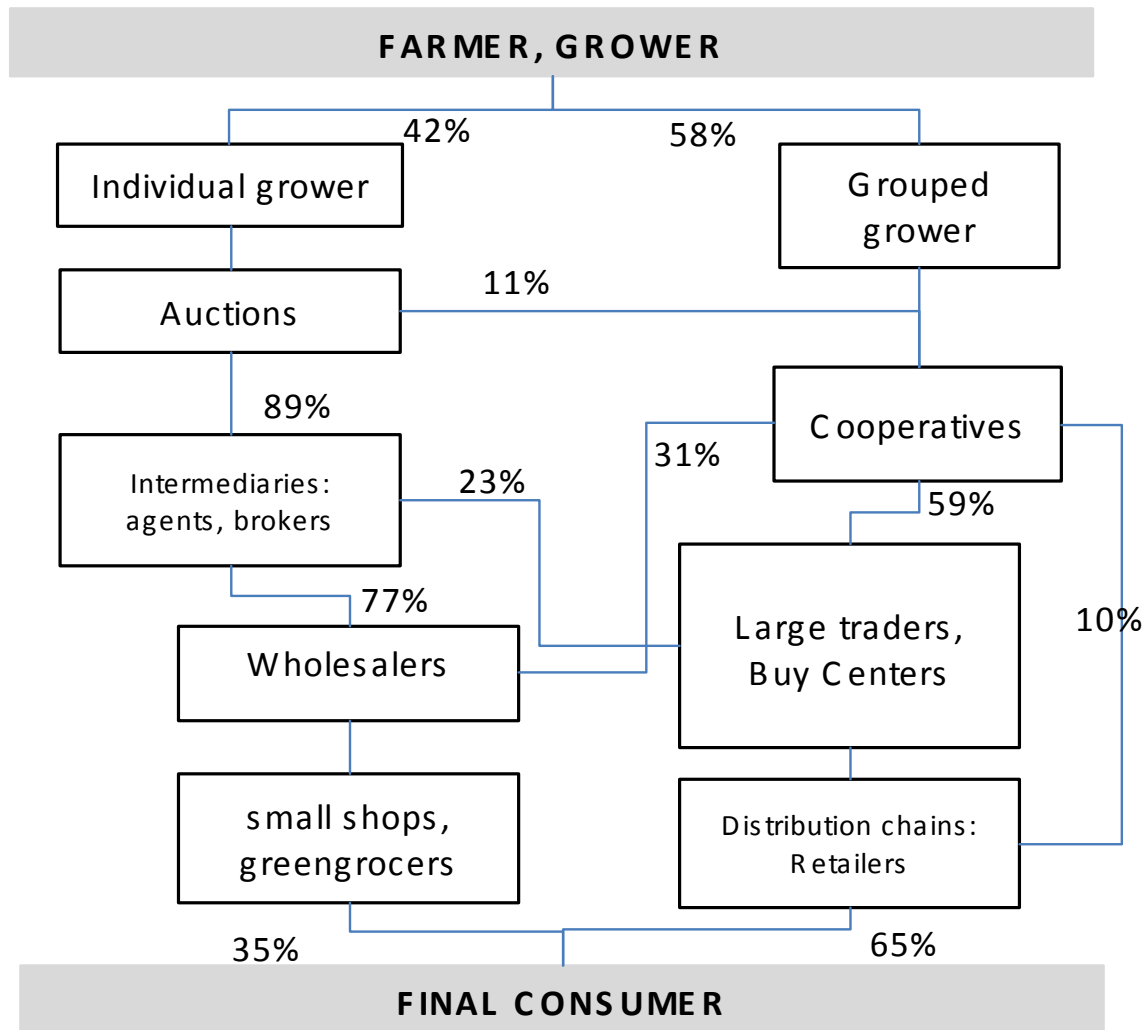
Relationship between key analysis variables



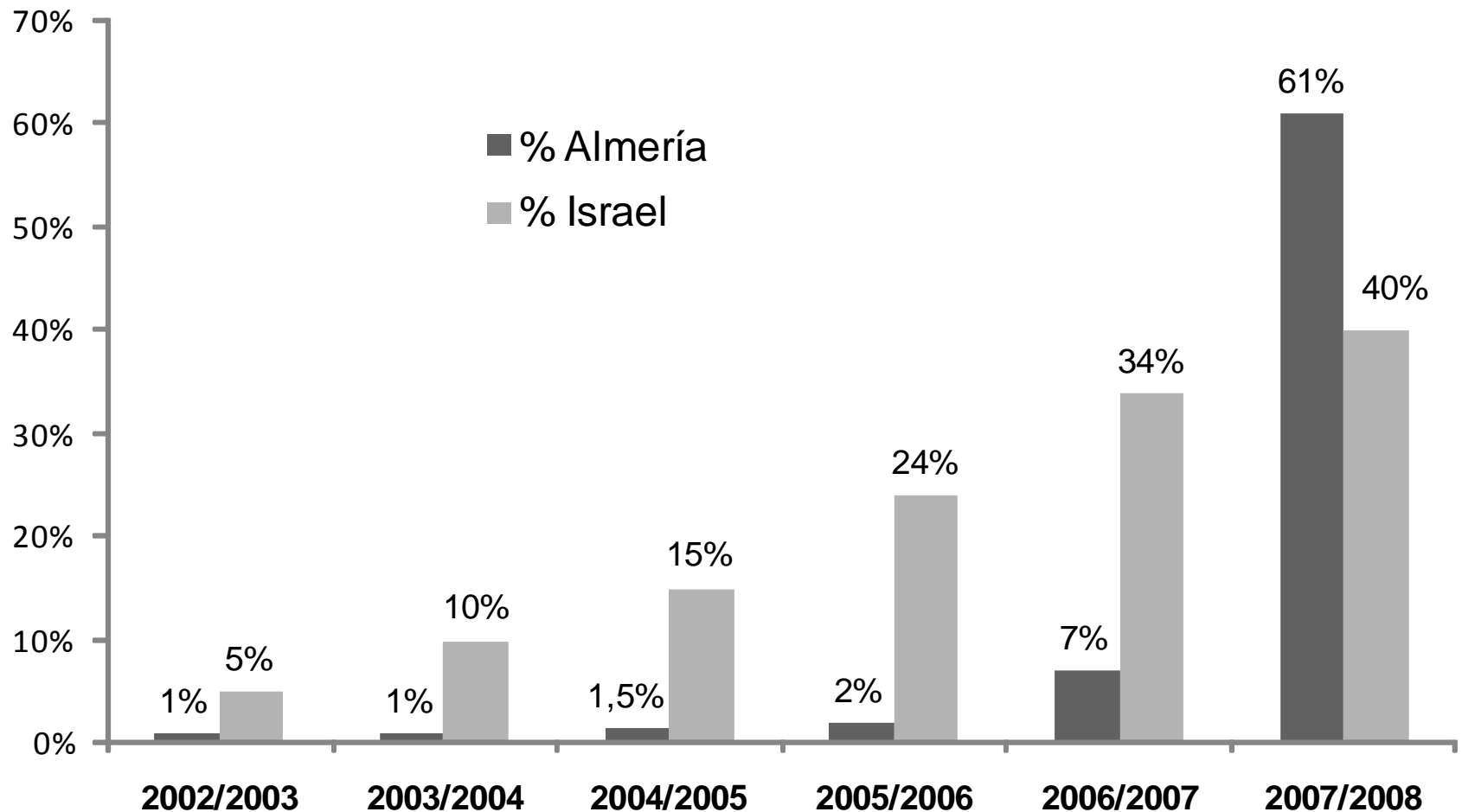
we may ask what the main role of the Almeria horticultural cluster is. For that reason, we make the following proposition:

- *The main role of the cluster is the diffusion of technology (not its development), and the most important difference of Almeria (Spain) in relation to other clusters is the “speed” of this process.*
- *The supply of technology is controlled by multinationals, i.e., the available technology is generic and it is not adapted to the characteristics of the area.*
- *The innovation pusher of the Almeria (Spain) horticultural cluster is the demand (retailers); therefore, it pushes local and external suppliers: increasing competition.*

Almerian Horticultural Marketing System



Evolution of Areas with IPM in Almeria and Israel. Peppers.



CONCLUSIONS (1):

- This study makes it clear that in agroindustrial clusters there are two important channels for the transfer of knowledge to the competition:
 - multinational companies established in auxiliary industry
 - and demand (retail distribution chain).
- Both actors share the same common denominator: **to standardize the technology utilized.**
- These facts condition the cluster in such a way that its priority function is the diffusion of technology and not its creation.

CONCLUSIONS (2):

- The existence of a cluster oriented towards diffusion has positive complementary aspects as a result of being the first to adopt innovations (order effect).
- **The problem:** the option to innovate is not *born* in the cluster: it is imposed by the demand (retailers).
- The competitive advantage that would be obtained by this rapid adaptation process is nullified (for the most part) because the retailer compels to firms to make the change.